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Reports of military injuries have advocated early thoracotomy and aggressive management of pulmonary injuries with resection an opposed to the more conservative and traditional treatment with chest tube thoracostomy in civilian trauma.

#### Methods

A retrospective study was performed to determine the incidence of thoracotomy and lung resection in civilian injuries and to evaluate the effective treatment of these injuries. Indications of thoracotomy were: 1- Air leakage after 2 weeks 2- drainage of more than 1500 cc blood after tube thoracostomy. 3- Bleeding speed more than 200cc/ hour. 4- Massive air leakage with collapsed lung.

All patients with mediastinal or heart trauma were excluded from this study.

#### Results

Between 1368-1382 in a series of 1168 patients there were 384-gunshot wound and 784-stab wound to the thorax. 283 patients with gunshot wound (74%) and 602 with stable wound (77%) were treated with chest tubes alone. 68 patients (6%) of the total required operative thoracotomy. Pulmonary resection was in 18 patients (9 wedge resection 6 lobectomy and 3 patients pneumonectomy). Mortality for all injuries was 2/3%. 0.7% for those treated with chest tube alone. 30% for pulmonaryhilar injuries. 8.6% for paranchymal injuries. 28% for lung resection.

### Conclusion

Most civilian lung injuries can be treated by tube thoracostomy alone. Only15-30% requiring thoracotomy among those most injuries can be handled by simple over sewing of the lung. Some patient may require pulmonary resection because of sever tissue destruction in this injuries lobectomy may be performed.

## Keyword

Trauma – civilian trauma – lung parenchyma – penetrating trauma